**Changes to the AITTL Requirements**
**Relative to Baseline 061496**
**CCR 96-0445C**

## Table 1 - Reference

| L4 ID | Rel | RTM Key | L4 Text | Clarification | Req Type | RbR ID | RTM key | RbR Text | RbR Type | Interpretation |
|-------|-----|---------|---------|---------------|----------|--------|---------|----------|----------|----------------|
| S-DPS-40260 | IR1 | 4556 | The AITTL CI shall have the capability to verify that Science Software source code is POSIX-compliant. | | functional | PGS-0650#A | 4198 | The PGS shall have the capability to validate required operational algorithm characteristics prior to scheduling algorithm test time.  These characteristics shall be include at a minimum: a. Language b. Operational impacts (e.g., algorithm software size, required resources) c. Algorithm documentation d. Data handling standards as appropriate e. Units and models used f. Operational compatibility g. Required metadata outputs | functional | |
| S-DPS-40260 | | | | | | PGS-0650#B | 4890 | The PGS shall have the capability to validate required operational algorithm characteristics prior to scheduling algorithm test time.  These characteristics shall be include at a minimum: a. Language b. Operational impacts (e.g., algorithm software size, required resources) c. Algorithm documentation d. Data handling standards as appropriate e. Units and models used f. Operational compatibility g. Required metadata outputs | functional | |

| S-DPS-40260 | | | | | | PGS-0650#Ir1 | 2285 | The PGS shall have the capability to validate required operational algorithm characteristics prior to scheduling algorithm test time.  These characteristics shall<br>be include at a minimum:<br>a. Language<br>b. Operational impacts (e.g., algorithm software size, required resources)<br>c. Algorithm documentation<br>d. Data handling standards as appropriate<br>e. Units and models used<br>f. Operational compatibility<br>g. Required metadata outputs | functional | |
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| S-DPS-40280 | IR1 | 4557 | The AITTL CI shall have the capability to verify that Science Software source code and Science Software scripts follow the following SDP Toolkit usage requirements (from 194-809-SD4-001, PGS Toolkit Users Guide for the ECS Project):<br>a.    Source code does not make any prohibited POSIX function calls<br>b.    The Status Message Text Process Control Files have the correct format | | functional | | | | | |
| S-DPS-40295 | IR1 | 4893 | The AITTL CI shall provide standards checking capabilities, including, but not limited to:<br>a. Flagging whenever a bit operation is used on signed numbers. (C only)<br>b. Flagging argument list mismatches (type and number of arguments). | | functional | | | | | |
| S-DPS-40405 | IR1 | 4562 | The AITTL CI shall have the capability to determine if the Science Software contains out of bounds indexing. | | functional | PGS-0920#Ir1 | 2297 | The PGS shall have the capability to validate, through testing, that SCF processing algorithms will execute properly in the operational environment. Validation shall include final compilation and linkage of the source code and testing to verify proper software execution in the operational environment based on indicated data and test results provided by the SCF and the investigator, but shall not include scientific validation of products. | functional | |

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| S-DPS-40405 | | | | | | PGS-0920#B | 4898 | The PGS shall have the capability to validate, through testing, that SCF processing algorithms will execute properly in the operational environment. Validation shall include final compilation and linkage of the source code and testing to verify proper software execution in the operational environment based on indicated data and test results provided by the SCF and the investigator, but shall not include scientific validation of products. | function al | B: AM-1, COLOR Transfer of algorithm implies verifying proper resource utilization resources.  ~~Transfer of algorithm implies verifying proper resource utilization resources.~~ |
| S-DPS-40405 | | | | | | ~~PGS-0920#A~~ | 4203 | The PGS shall have the capability to validate, through testing, that SCF processing algorithms will execute properly in the operational environment. Validation shall include final compilation and linkage of the source code and testing to verify proper software execution in the operational environment based on indicated data and test results provided by the SCF and the investigator, but shall not include scientific validation of products. | function al | |
| S-DPS-40900 | ~~IR1~~ | ~~4579~~ | ~~The AITTL CI shall have the capability to find all differences between two data files which are greater than some specified absolute threshold.~~ | | ~~functio nal~~ | PGS-0620#A | 4195 | The PGS shall have the capability to validate received calibration coefficients for completeness and correct format. | function al | |
| S-DPS-40900 | | | | | | ~~PGS-0920#A~~ | 4203 | The PGS shall have the capability to validate, through testing, that SCF processing algorithms will execute properly in the operational environment. Validation shall include final compilation and linkage of the source code and testing to verify proper software execution in the operational environment based on indicated data and test results provided by the SCF and the investigator, but shall not include scientific validation of products. | function al | |
| S-DPS-40900 | | | | | | ~~PGS-0910#A~~ | 4202 | The PGS shall have the capability to support analysis of algorithm test results. | function al | |

| S-DPS- | | | | | | PGS | | | functional | |
|---|---|---|---|---|---|---|---|---|---|---|
| S-DPS-40900 | | | | | | PGS-0620#B | 4887 | The PGS shall have the capability to validate received calibration coefficients for completeness and correct format. | functional | |
| S-DPS-40900 | | | | | | PGS-0910#B | 4896 | The PGS shall have the capability to support analysis of algorithm test results. | functional | |
| S-DPS-40900 | | | | | | PGS-0920#B | 4898 | The PGS shall have the capability to validate, through testing, that SCF processing algorithms will execute properly in the operational environment. Validation shall include final compilation and linkage of the source code and testing to verify proper software execution in the operational environment based on indicated data and test results provided by the SCF and the investigator, but shall not include scientific validation of products. | functional | B: AM-1, COLOR Transfer of algorithm implies verifying proper resource utilization resources. ~~Transfer of algorithm implies verifying proper resource utilization resources.~~ |
| S-DPS-40900 | | | | | | PGS-0620#Ir 1 | 2275 | The PGS shall have the capability to validate received calibration coefficients for completeness and correct format. | functional | IR1: TRMM and SCF |
| S-DPS-40900 | | | | | | PGS-0910#Ir 1 | 2296 | The PGS shall have the capability to support analysis of algorithm test results. | functional | IR1: Accomplished via comparison tools. |
| S-DPS-40900 | | | | | | PGS-0650#Ir 1 | 2285 | The PGS shall have the capability to validate required operational algorithm characteristics prior to scheduling algorithm test time.  These characteristics shall be include at a minimum: a. Language b. Operational impacts (e.g., algorithm software size, required resources) c. Algorithm documentation d. Data handling standards as appropriate e. Units and models used f. Operational compatibility g. Required metadata outputs | functional | |

| S-DPS-40910 | IR1 | 4580 | The AITTL CI shall have the capability to find all differences between two HDF data files which are greater than ~~some specified relative threshold~~ a tolerance specified within the metadata of standard files. | AITTL capabilities include file comparison functions for HDF files. These can be used only if the user embeds the tolerance factors into the files. | functional | | | | | |
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| S-DPS-40930 | IR1 | 4582 | The file comparison capability of the AITTL CI shall include the capability to read ASCII, ~~binary,~~ or HDF files. | | functional | | | | | |
| S-DPS-40940 | IR1 | 4583 | The file comparison capability of the AITTL CI shall include the capability to allow the operations staff to specify a custom data format for binary files. | AITTL provides templates/tools to allow operations to generate generic file comparison utilities for binary format files. | functional | | | | | |
| S-DPS-41000 | IR1 | 4584 | The AITTL CI shall have the capability to measure the CPU time of a PGE ~~process~~. | | functional | | | | | |
| S-DPS-41005 | IR1 | 4585 | The AITTL CI shall have the capability to measure the wall clock time of a ~~process~~ PGE.. | | functional | | | | | |
| S-DPS-41020 | IR1 | 4588 | The AITTL CI shall have the capability to measure the memory usage of a ~~process~~ PGE. | | functional | | | | | |
| S-DPS-41030 | IR1 | 4589 | The AITTL CI shall have the capability to measure the disk space usage of a ~~process~~ PGE. | | functional | | | | | |
| S-DPS-41035 | IR1 | 4590 | The AITTL CI shall have the capability to count the number of page faults for a ~~process~~ PGE. | | functional | | | | | |
| S-DPS-41040 | IR1 | 4591 | The AITTL CI shall have the capability to count the number of I/O accesses made by a ~~process~~ PGE to each of its input and output data files. | | functional | | | | | |

| S-DPS-41410 | IR1 A | 9140 | The AITTL CI shall include access to a problem tracking tool supplied by MSS. | | interface | PGS-0950#A | 4217 | The PGS shall interface to maintain configuration control of all algorithms and calibration coefficients used in operational Standard Product production. Controlled information shall contain at a minimum:<br>a. Source code including version number and author<br>b. Benchmark test procedures, test data, and results<br>c. Date and time of operational installation<br>d. Compiler identification and version<br>e. Final algorithm documentation | functional | |
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| S-DPS-41900 | A | 4619 | The AITTL CI shall provide ~~to the operations staff, via a GUI,~~ an HTML page describing the ECS instruments and providing hyperlinks to the PGE Listing Page for each team. ~~the capability to retrieve a specified data file from a specified Data Server.~~ | | functional | ~~PGS-0920#A~~ | 4203 | The PGS shall have the capability to validate, through testing, that SCF processing algorithms will execute properly in the operational environment. Validation shall include final compilation and linkage of the source code and testing to verify proper software execution in the operational environment based on indicated data and test results provided by the SCF and the investigator, but shall not include scientific validation of products. | functional | |
| S-DPS-41900 | | | | | | PGS-0920#B | 4898 | The PGS shall have the capability to validate, through testing, that SCF processing algorithms will execute properly in the operational environment. Validation shall include final compilation and linkage of the source code and testing to verify proper software execution in the operational environment based on indicated data and test results provided by the SCF and the investigator, but shall not include scientific validation of products. | functional | B: AM-1, COLOR Transf. of algorithm implies verifying proper resource utilization resources.<br><br>~~Transfer of algorithm implies verifying proper resource utilization resources.~~ |

| S-DPS-41900 | | | | | | DADS2 330#A | 4479 | Each DADS shall send to the PGS, at a minimum, the following:<br>b. L0-L4<br>d. Metadata<br>e. Ancillary data<br>f. Calibration data<br>g. Algorithms<br>h. Schedules<br>i. Status<br>k. Special data sets<br>l. Non-EOS science data from ADCs/ODCs | function al | A: sub-item  A:  ONLY THE  GSFC AND LARC DAACS WILL INTERFACE WITH EDO 1: 'algorithms' implies science software components. Algorithm and calibration data are accessed by HTML services provided throug Data Server |
| S-DPS-41900 | | | | | | DADS2 330#B | 3612 | Each DADS shall send to the PGS, at a minimum, the following:<br>a. Production data (L0) received from EDOS<br>b. L0-L4<br>d. Metadata<br>e. Ancillary data<br>f. Calibration data<br>g. Algorithms<br>h. Schedules<br>i. Status<br>j. Spacecraft and instrument logs<br>k. Special data sets<br>l. Non-EOS science data from ADCs/ODCs | function al | A & B:  ONLY THE GSFC AND LARC DAAC WILL INTERFACE WITH EDOS;<br>1: 'algorithms' implies science software components. Algorithm and calibration data are accessed by HTML services provided throug Data Server |
| S-DPS-41900 | | | | | | DADS2 370#A | 4485 | Each DADS shall send to the user, at a minimum, the following:<br>a. L0-L4<br>b. Special products (L1-L4)<br>c. Metadata<br>d. Ancillary data<br>e. Calibration data<br>f. Correlative data<br>g. Documents<br>h. Algorithms<br>i. Planning and scheduling information | function al | 1: 'algorithms' implies science software components. Algorithm and calibration data are accessed by HTML services provided throug Data Server |

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| S-DPS-41900 | | | | | | DADS2 370#B | 3616 | Each DADS shall send to the user, at a minimum, the following:<br>a. L0-L4<br>b. Special products (L1-L4)<br>c. Metadata<br>d. Ancillary data<br>e. Calibration data<br>f. Correlative data<br>g. Documents<br>h. Algorithms<br>i. Planning and scheduling information | function al | 1: 'algorithms' implies science software components. Algorithm and calibration data are accessed by HTML services provided throug Data Server |
| S-DPS-41900 | | | | | | DADS2 380#A | 6133 | Each DADS shall send to the SCF, at a minimum, the following:<br>a. L0-L4<br>b. Expedited data<br>d. Metadata<br>e. Ancillary data<br>f. Calibration data<br>g. Correlative data<br>h. Documents<br>i. Algorithms | function al | 1: 'algorithms' implies science software components. Algorithm and calibration data are accessed by HTML services provided throug Data Server |
| S-DPS-41900 | | | | | | DADS2 380#B | 6132 | Each DADS shall send to the SCF, at a minimum, the following:<br>a. L0-L4<br>b. Expedited data<br>c. Special products (L1-L4)<br>d. Metadata<br>e. Ancillary data<br>f. Calibration data<br>g. Correlative data<br>h. Documents<br>i. Algorithms | function al | 1: 'algorithms' implies science software components. Algorithm and calibration data are accessed by HTML services provided throug Data Server |
| S-DPS-41900 | | | | | | SCF-0320#A | 2460 | The ECS shall be capable of sending to the SCF Calibration Coefficients. These shall include the calibration coefficients requested by the scientist at the SCF in the Calibration Coefficient Request. | interface | 1: Calibration data are accessed by HTML services provided throug Data Server |
| S-DPS-41900 | | | | | | SCF-0320#B | 2461 | The ECS shall be capable of sending to the SCF Calibration Coefficients. These shall include the calibration coefficients requested by the scientist at the SCF in the Calibration Coefficient Request. | interface | 1: Calibration data are accessed by HTML services provided throug Data Server |

| S-DPS-41901 | A | NEW | The AITTL CI shall provide an HTML PGE Listing Page for each instrument team, identifying each PGE for which a software package is available, with references to its Software Version Page (if it exists) or else to its Software Listing Page. | | functio nal | DADS2 330#A | 4479 | Each DADS shall send to the PGS, at a minimum, the following: b. L0-L4 d. Metadata e. Ancillary data f. Calibration data g. Algorithms h. Schedules i. Status k. Special data sets l. Non-EOS science data from ADCs/ODCs | function al | A: sub-item  A:  ONLY THE  GSFC AND LARC DAACS WILL INTERFACE WITH EDO 1: 'algorithms' implies science software components. Algorithm and calibration data are accessed by HTML services provided throug Data Server |
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| S-DPS-41901 | | | | | | DADS2 330#B | 3612 | Each DADS shall send to the PGS, at a minimum, the following: a. Production data (L0) received from EDOS b. L0-L4 d. Metadata e. Ancillary data f. Calibration data g. Algorithms h. Schedules i. Status j. Spacecraft and instrument logs k. Special data sets l. Non-EOS science data from ADCs/ODCs | function al | A & B:  ONLY THE GSFC AND LARC DAAC WILL INTERFACE WITH EDOS; 1: 'algorithms' implies science software components. Algorithm and calibration data are accessed by HTML services provided throug Data Server |
| S-DPS-41901 | | | | | | DADS2 370#A | 4485 | Each DADS shall send to the user, at a minimum, the following: a. L0-L4 b. Special products (L1-L4) c. Metadata d. Ancillary data e. Calibration data f. Correlative data g. Documents h. Algorithms i. Planning and scheduling information | function al | 1: 'algorithms' implies science software components. Algorithm and calibration data are accessed by HTML services provided throug Data Server |

| S-DPS-41901 | | | | | | DADS2 370#B | 3616 | Each DADS shall send to the user, at a minimum, the following:<br>a. L0-L4<br>b. Special products (L1-L4)<br>c. Metadata<br>d. Ancillary data<br>e. Calibration data<br>f. Correlative data<br>g. Documents<br>h. Algorithms<br>i. Planning and scheduling information | functional | 1: 'algorithms' implies science software components. Algorithm and calibration data are accessed by HTML services provided throug Data Server |
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| S-DPS-41901 | | | | | | DADS2 380#A | 6133 | Each DADS shall send to the SCF, at a minimum, the following:<br>a. L0-L4<br>b. Expedited data<br>d. Metadata<br>e. Ancillary data<br>f. Calibration data<br>g. Correlative data<br>h. Documents<br>i. Algorithms | functional | 1: 'algorithms' implies science software components. Algorithm and calibration data are accessed by HTML services provided throug Data Server |
| S-DPS-41901 | | | | | | DADS2 380#B | 6132 | Each DADS shall send to the SCF, at a minimum, the following:<br>a. L0-L4<br>b. Expedited data<br>c. Special products (L1-L4)<br>d. Metadata<br>e. Ancillary data<br>f. Calibration data<br>g. Correlative data<br>h. Documents<br>i. Algorithms | functional | 1: 'algorithms' implies science software components. Algorithm and calibration data are accessed by HTML services provided throug Data Server |
| S-DPS-41901 | | | | | | SCF-0320#A | 2460 | The ECS shall be capable of sending to the SCF Calibration Coefficients. These shall include the calibration coefficients requested by the scientist at the SCF in the Calibration Coefficient Request. | interface | 1: Calibration data are accessed by HTML services provided throug Data Server |
| S-DPS-41901 | | | | | | SCF-0320#B | 2461 | The ECS shall be capable of sending to the SCF Calibration Coefficients. These shall include the calibration coefficients requested by the scientist at the SCF in the Calibration Coefficient Request. | interface | 1: Calibration data are accessed by HTML services provided throug Data Server |

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| S-DPS-41902 | A | NEW | The AITTL CI shall provide an HTML Software Version Page for each PGE, if multiple baseline software versions for that PGE are available, identifying the instrument and PGE, the version number and date, and provide a reference to the Software Listing Page. | | functional | DADS2330#A | 4479 | Each DADS shall send to the PGS, at a minimum, the following: b. L0-L4 d. Metadata e. Ancillary data f. Calibration data g. Algorithms h. Schedules i. Status k. Special data sets l. Non-EOS science data from ADCs/ODCs | functional | A: sub-item  A: ONLY THE  GSFC AND LARC DAACS WILL INTERFACE WITH EDO 1: 'algorithms' implies science software components. Algorithm and calibration data are accessed by HTML services provided throug Data Server |
| S-DPS-41902 | | | | | | DADS2330#B | 3612 | Each DADS shall send to the PGS, at a minimum, the following: a. Production data (L0) received from EDOS b. L0-L4 d. Metadata e. Ancillary data f. Calibration data g. Algorithms h. Schedules i. Status j. Spacecraft and instrument logs k. Special data sets l. Non-EOS science data from ADCs/ODCs | functional | A & B:  ONLY THE GSFC AND LARC DAAC WILL INTERFACE WITH EDOS; 1: 'algorithms' implies science software components. Algorithm and calibration data are accessed by HTML services provided throug Data Server |
| S-DPS-41902 | | | | | | DADS2370#A | 4485 | Each DADS shall send to the user, at a minimum, the following: a. L0-L4 b. Special products (L1-L4) c. Metadata d. Ancillary data e. Calibration data f. Correlative data g. Documents h. Algorithms i. Planning and scheduling information | functional | 1: 'algorithms' implies science software components. Algorithm and calibration data are accessed by HTML services provided throug Data Server |

| S-DPS-41902 | | | | | | DADS2 370#B | 3616 | Each DADS shall send to the user, at a minimum, the following:<br>a. L0-L4<br>b. Special products (L1-L4)<br>c. Metadata<br>d. Ancillary data<br>e. Calibration data<br>f. Correlative data<br>g. Documents<br>h. Algorithms<br>i. Planning and scheduling information | functional | 1: 'algorithms' implies science software components. Algorithm and calibration data are accessed by HTML services provided throug Data Server |
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| S-DPS-41902 | | | | | | DADS2 380#A | 6133 | Each DADS shall send to the SCF, at a minimum, the following:<br>a. L0-L4<br>b. Expedited data<br>d. Metadata<br>e. Ancillary data<br>f. Calibration data<br>g. Correlative data<br>h. Documents<br>i. Algorithms | functional | 1: 'algorithms' implies science software components. Algorithm and calibration data are accessed by HTML services provided throug Data Server |
| S-DPS-41902 | | | | | | DADS2 380#B | 6132 | Each DADS shall send to the SCF, at a minimum, the following:<br>a. L0-L4<br>b. Expedited data<br>c. Special products (L1-L4)<br>d. Metadata<br>e. Ancillary data<br>f. Calibration data<br>g. Correlative data<br>h. Documents<br>i. Algorithms | functional | 1: 'algorithms' implies science software components. Algorithm and calibration data are accessed by HTML services provided throug Data Server |
| S-DPS-41902 | | | | | | SCF-0320#A | 2460 | The ECS shall be capable of sending to the SCF Calibration Coefficients. These shall include the calibration coefficients requested by the scientist at the SCF in the Calibration Coefficient Request. | interface | 1: Calibration data are accessed by HTML services provided throug Data Server |
| S-DPS-41902 | | | | | | SCF-0320#B | 2461 | The ECS shall be capable of sending to the SCF Calibration Coefficients. These shall include the calibration coefficients requested by the scientist at the SCF in the Calibration Coefficient Request. | interface | 1: Calibration data are accessed by HTML services provided throug Data Server |

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| S-DPS-41903 | A | NEW | The AITTL CI shall provide an HTML Software Listing Page for each baselined PGE version, identifying each existing component of the PGE software package (as defined in the ECS Core Metadata Model) and provide a hyperlink that can be used to retrieve that component. | | functional | DADS2 330#A | 4479 | Each DADS shall send to the PGS, at a minimum, the following:<br>b. L0-L4<br>d. Metadata<br>e. Ancillary data<br>f. Calibration data<br>g. Algorithms<br>h. Schedules<br>i. Status<br>k. Special data sets<br>l. Non-EOS science data from ADCs/ODCs | functional | A: sub-item  A: ONLY THE  GSFC AND LARC DAACS WILL INTERFACE WITH EDO 1: 'algorithms' implies science software components. Algorithm and calibration data are accessed by HTML services provided throug Data Server |
| S-DPS-41903 | | | | | | DADS2 330#B | 3612 | Each DADS shall send to the PGS, at a minimum, the following:<br>a. Production data (L0) received from EDOS<br>b. L0-L4<br>d. Metadata<br>e. Ancillary data<br>f. Calibration data<br>g. Algorithms<br>h. Schedules<br>i. Status<br>j. Spacecraft and instrument logs<br>k. Special data sets<br>l. Non-EOS science data from ADCs/ODCs | functional | A & B:  ONLY THE GSFC AND LARC DAAC WILL INTERFACE WITH EDOS;<br>1: 'algorithms' implies science software components. Algorithm and calibration data are accessed by HTML services provided throug Data Server |
| S-DPS-41903 | | | | | | DADS2 370#A | 4485 | Each DADS shall send to the user, at a minimum, the following:<br>a. L0-L4<br>b. Special products (L1-L4)<br>c. Metadata<br>d. Ancillary data<br>e. Calibration data<br>f. Correlative data<br>g. Documents<br>h. Algorithms<br>i. Planning and scheduling information | functional | 1: 'algorithms' implies science software components. Algorithm and calibration data are accessed by HTML services provided throug Data Server |

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| S-DPS-41903 | | | | | | DADS2 370#B | 3616 | Each DADS shall send to the user, at a minimum, the following:<br>a. L0-L4<br>b. Special products (L1-L4)<br>c. Metadata<br>d. Ancillary data<br>e. Calibration data<br>f. Correlative data<br>g. Documents<br>h. Algorithms<br>i. Planning and scheduling information | functional | 1: 'algorithms' implies science software components. Algorithm and calibration data are accessed by HTML services provided throug Data Server |
| S-DPS-41903 | | | | | | DADS2 380#A | 6133 | Each DADS shall send to the SCF, at a minimum, the following:<br>a. L0-L4<br>b. Expedited data<br>d. Metadata<br>e. Ancillary data<br>f. Calibration data<br>g. Correlative data<br>h. Documents<br>i. Algorithms | functional | 1: 'algorithms' implies science software components. Algorithm and calibration data are accessed by HTML services provided throug Data Server |
| S-DPS-41903 | | | | | | DADS2 380#B | 6132 | Each DADS shall send to the SCF, at a minimum, the following:<br>a. L0-L4<br>b. Expedited data<br>c. Special products (L1-L4)<br>d. Metadata<br>e. Ancillary data<br>f. Calibration data<br>g. Correlative data<br>h. Documents<br>i. Algorithms | functional | 1: 'algorithms' implies science software components. Algorithm and calibration data are accessed by HTML services provided throug Data Server |
| S-DPS-41903 | | | | | | SCF-0320#A | 2460 | The ECS shall be capable of sending to the SCF Calibration Coefficients. These shall include the calibration coefficients requested by the scientist at the SCF in the Calibration Coefficient Request. | interface | 1: Calibration data are accessed by HTML services provided throug Data Server |
| S-DPS-41903 | | | | | | SCF-0320#B | 2461 | The ECS shall be capable of sending to the SCF Calibration Coefficients. These shall include the calibration coefficients requested by the scientist at the SCF in the Calibration Coefficient Request. | interface | 1: Calibration data are accessed by HTML services provided throug Data Server |

| S-DSS-10370 | A | NEW | The DDSRV shall support the display and access to (with links to the software package components they reference), the AITTL CI developed HTML pages, as follows:<br>a) ECS Instruments Page<br>b) PGE Listing Page<br>c) Software Version Page<br>d) Software Listing Page | | functional | DADS2 330#A | 4479 | Each DADS shall send to the PGS, at a minimum, the following:<br>b. L0-L4<br>d. Metadata<br>e. Ancillary data<br>f. Calibration data<br>g. Algorithms<br>h. Schedules<br>i. Status<br>k. Special data sets<br>l. Non-EOS science data from ADCs/ODCs | functional | A: sub-item  A: ONLY THE  GSFC AND LARC DAACS WILL INTERFACE WITH EDO 1: 'algorithms' implies science software components. Algorithm and calibration data are accessed by HTML services provided throug Data Server |
| S-DSS-10370 | | | | | | DADS2 330#B | 3612 | Each DADS shall send to the PGS, at a minimum, the following:<br>a. Production data (L0) received from EDOS<br>b. L0-L4<br>d. Metadata<br>e. Ancillary data<br>f. Calibration data<br>g. Algorithms<br>h. Schedules<br>i. Status<br>j. Spacecraft and instrument logs<br>k. Special data sets<br>l. Non-EOS science data from ADCs/ODCs | functional | A & B:  ONLY THE GSFC AND LARC DAAC WILL INTERFACE WITH EDOS;<br>1: 'algorithms' implies science software components. Algorithm and calibration data are accessed by HTML services provided throug Data Server |
| S-DSS-10370 | | | | | | DADS2 370#A | 4485 | Each DADS shall send to the user, at a minimum, the following:<br>a. L0-L4<br>b. Special products (L1-L4)<br>c. Metadata<br>d. Ancillary data<br>e. Calibration data<br>f. Correlative data<br>g. Documents<br>h. Algorithms<br>i. Planning and scheduling information | functional | 1: 'algorithms' implies science software components. Algorithm and calibration data are accessed by HTML services provided throug Data Server |

| S-DSS-10370 | | | | | | DADS2 370#B | 3616 | Each DADS shall send to the user, at a minimum, the following:<br>a. L0-L4<br>b. Special products (L1-L4)<br>c. Metadata<br>d. Ancillary data<br>e. Calibration data<br>f. Correlative data<br>g. Documents<br>h. Algorithms<br>i. Planning and scheduling information | functional | 1: 'algorithms' implies science software components. Algorithm and calibration data are accessed by HTML services provided throug Data Server |
|---|---|---|---|---|---|---|---|---|---|---|
| S-DSS-10370 | | | | | | DADS2 380#A | 6133 | Each DADS shall send to the SCF, at a minimum, the following:<br>a. L0-L4<br>b. Expedited data<br>d. Metadata<br>e. Ancillary data<br>f. Calibration data<br>g. Correlative data<br>h. Documents<br>i. Algorithms | functional | 1: 'algorithms' implies science software components. Algorithm and calibration data are accessed by HTML services provided throug Data Server |
| S-DSS-10370 | | | | | | DADS2 380#B | 6132 | Each DADS shall send to the SCF, at a minimum, the following:<br>a. L0-L4<br>b. Expedited data<br>c. Special products (L1-L4)<br>d. Metadata<br>e. Ancillary data<br>f. Calibration data<br>g. Correlative data<br>h. Documents<br>i. Algorithms | functional | 1: 'algorithms' implies science software components. Algorithm and calibration data are accessed by HTML services provided throug Data Server |
| S-DSS-10370 | | | | | | SCF-0320#A | 2460 | The ECS shall be capable of sending to the SCF Calibration Coefficients. These shall include the calibration coefficients requested by the scientist at the SCF in the Calibration Coefficient Request. | interface | 1: Calibration data are accessed by HTML services provided throug Data Server |
| S-DSS-10370 | | | | | | SCF-0320#B | 2461 | The ECS shall be capable of sending to the SCF Calibration Coefficients. These shall include the calibration coefficients requested by the scientist at the SCF in the Calibration Coefficient Request. | interface | 1: Calibration data are accessed by HTML services provided throug Data Server |

| S-DSS-05000 | A | NEW | The SDSRV CI shall manage algorithm packages as defined in the the ECS Core Metadata Model, and provide interfaces for storing and accessing them. | | functional | DADS2 330#A | 4479 | Each DADS shall send to the PGS, at a minimum, the following:<br>b. L0-L4<br>d. Metadata<br>e. Ancillary data<br>f. Calibration data<br>g. Algorithms<br>h. Schedules<br>i. Status<br>k. Special data sets<br>l. Non-EOS science data from ADCs/ODCs | functional | A: sub-item  A: ONLY THE  GSFC AND LARC DAACS WILL INTERFACE WITH EDO 1: 'algorithms' implies science software components. Algorithm and calibration data are accessed by HTML services provided throug Data Server |
| S-DSS-05000 | | | | | | DADS2 330#B | 3612 | Each DADS shall send to the PGS, at a minimum, the following:<br>a. Production data (L0) received from EDOS<br>b. L0-L4<br>d. Metadata<br>e. Ancillary data<br>f. Calibration data<br>g. Algorithms<br>h. Schedules<br>i. Status<br>j. Spacecraft and instrument logs<br>k. Special data sets<br>l. Non-EOS science data from ADCs/ODCs | functional | A & B:  ONLY THE GSFC AND LARC DAAC WILL INTERFACE WITH EDOS;<br>1: 'algorithms' implies science software components. Algorithm and calibration data are accessed by HTML services provided throug Data Server |
| S-DSS-05000 | | | | | | DADS2 370#A | 4485 | Each DADS shall send to the user, at a minimum, the following:<br>a. L0-L4<br>b. Special products (L1-L4)<br>c. Metadata<br>d. Ancillary data<br>e. Calibration data<br>f. Correlative data<br>g. Documents<br>h. Algorithms<br>i. Planning and scheduling information | functional | 1: 'algorithms' implies science software components. Algorithm and calibration data are accessed by HTML services provided throug Data Server |

| S-DSS-05000 | | | | | | DADS2 370#B | 3616 | Each DADS shall send to the user, at a minimum, the following:<br>a. L0-L4<br>b. Special products (L1-L4)<br>c. Metadata<br>d. Ancillary data<br>e. Calibration data<br>f. Correlative data<br>g. Documents<br>h. Algorithms<br>i. Planning and scheduling information | function al | 1: 'algorithms' implies science software components. Algorithm and calibration data are accessed by HTML services provided throug Data Server |
|---|---|---|---|---|---|---|---|---|---|---|
| S-DSS-05000 | | | | | | DADS2 380#A | 6133 | Each DADS shall send to the SCF, at a minimum, the following:<br>a. L0-L4<br>b. Expedited data<br>d. Metadata<br>e. Ancillary data<br>f. Calibration data<br>g. Correlative data<br>h. Documents<br>i. Algorithms | function al | 1: 'algorithms' implies science software components. Algorithm and calibration data are accessed by HTML services provided throug Data Server |
| S-DSS-05000 | | | | | | DADS2 380#B | 6132 | Each DADS shall send to the SCF, at a minimum, the following:<br>a. L0-L4<br>b. Expedited data<br>c. Special products (L1-L4)<br>d. Metadata<br>e. Ancillary data<br>f. Calibration data<br>g. Correlative data<br>h. Documents<br>i. Algorithms | function al | 1: 'algorithms' implies science software components. Algorithm and calibration data are accessed by HTML services provided throug Data Server |
| S-DSS-05000 | | | | | | SCF-0320#A | 2460 | The ECS shall be capable of sending to the SCF Calibration Coefficients. These shall include the calibration coefficients requested by the scientist at the SCF in the Calibration Coefficient Request. | interface | 1: Calibration data are accessed by HTML services provided throug Data Server |
| S-DSS-05000 | | | | | | SCF-0320#B | 2461 | The ECS shall be capable of sending to the SCF Calibration Coefficients. These shall include the calibration coefficients requested by the scientist at the SCF in the Calibration Coefficient Request. | interface | 1: Calibration data are accessed by HTML services provided throug Data Server |

| S-DPS-42005 | IR1 | 4621 | The AITTL CI shall provide the operations staff with the capability to edit the metadata associated with a data file. | | functio nal | PGS-0650#B | 4890 | The PGS shall have the capability to validate required operational algorithm characteristics prior to scheduling algorithm test time.  These characteristics shall be include at a minimum: a. Language b. Operational impacts (e.g., algorithm software size, required resources) c. Algorithm documentation d. Data handling standards as appropriate e. Units and models used f. Operational compatibility g. Required metadata outputs | function al | |
|---|---|---|---|---|---|---|---|---|---|---|
| S-DPS-42005 | | | | | | PGS-0920#B | 4898 | The PGS shall have the capability to validate, through testing, that SCF processing algorithms will execute properly in the operational environment. Validation shall include final compilation and linkage of the source code and testing to verify proper software execution in the operational environment based on indicated data and test results provided by the SCF and the investigator, but shall not include scientific validation of products. | function al | B: AM-1, COLOR Transf of algorithm implies verifying proper resource utilization resources. Transfer of algorithm implies verifying proper resource utilization resources. |
| S-DPS-42005 | | | | | | PGS-0650#A | 4198 | The PGS shall have the capability to validate required operational algorithm characteristics prior to scheduling algorithm test time.  These characteristics shall be include at a minimum: a. Language b. Operational impacts (e.g., algorithm software size, required resources) c. Algorithm documentation d. Data handling standards as appropriate e. Units and models used f. Operational compatibility g. Required metadata outputs | function al | |

| S-DPS-42005 | | | | | | PGS-0920#A | 4203 | The PGS shall have the capability to validate, through testing, that SCF processing algorithms will execute properly in the operational environment. Validation shall include final compilation and linkage of the source code and testing to verify proper software execution in the operational environment based on indicated data and test results provided by the SCF and the investigator, but shall not include scientific validation of products. | functional | |
| S-DPS-42005 | | | | | | ~~PGS-0920#Ir 1~~ | 2297 | The PGS shall have the capability to validate, through testing, that SCF processing algorithms will execute properly in the operational environment. Validation shall include final compilation and linkage of the source code and testing to verify proper software execution in the operational environment based on indicated data and test results provided by the SCF and the investigator, but shall not include scientific validation of products. | functional | |
| ~~S-DPS-42005~~ | | | | | | ~~PGS-0650#Ir 1~~ | 2285 | The PGS shall have the capability to validate required operational algorithm characteristics prior to scheduling algorithm test time.  These characteristics shall be include at a minimum: a. Language b. Operational impacts (e.g., algorithm software size, required resources) c. Algorithm documentation d. Data handling standards as appropriate e. Units and models used f. Operational compatibility g. Required metadata outputs | functional | |
| S-DPS-42340 | A | 4642 | The operations staff shall have the capability to perform dynamic analyses of source code for (at a minimum) memory leaks, ~~out of bounds indexing,~~ and distribution of resource demands. | | functional | | | | | |

| S-DPS-42360 | IR1 | 4644 | The operations staff shall have the capability of determining the computing resources utilized by an execution of a PGE; viz., PGE CPU time, system CPU time, elapsed time, percent elapsed time, ~~shared memory use~~, maximum memory used, number of page faults, number of swaps, number of block input operations, and number of block output operations. | | functional | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| S-DPS-42610 | ~~IR1~~ A | 4658 | The operations staff shall enter new PGEs into the PGE Database, along with their performance and resource utilization information. | | procedural | PGS-0930#A | 4205 | The PGS shall have the capability to transfer validated algorithm software and calibration coefficients from the test environment to the operational environment to be used in the production of Standard Products. | functional | A: TRMM  Transfer of algorithm implies verifying proper resource utilization resources. |
| S-DPS-42610 | | | | | | PGS-0960#A | 4220 | The PGS shall send the DADS new or modified algorithms.  This delivery shall contain the following information at a minimum: a. Source code including version number and author b. Benchmark test procedures, test data and results c. Date and time of operational installation d. Final algorithm documentation e. Calibration coefficient values | functional | A: CERES, LIS |
| S-DPS-42620 | ~~IR1~~ A | 4659 | The operations staff shall update information the PGE Database as necessary to reflect changes in performance and resource utilization resulting from a modification to a PGE. | | procedural | PGS-0930#A | 4205 | The PGS shall have the capability to transfer validated algorithm software and calibration coefficients from the test environment to the operational environment to be used in the production of Standard Products. | functional | A: TRMM  Transfer of algorithm implies verifying proper resource utilization resources. |
| S-DPS-42620 | | | | | | PGS-0960#A | 4220 | The PGS shall send the DADS new or modified algorithms.  This delivery shall contain the following information at a minimum: a. Source code including version number and author b. Benchmark test procedures, test data and results c. Date and time of operational installation d. Final algorithm documentation e. Calibration coefficient values | functional | A: CERES, LIS |

## Table 2:  Level 4 Requirements Changes

Note:  Table

| L4 ID | Rel | RTM Key | L4 Text | Clarification | Req Type | req_status | verification_method |
|-------|-----|---------|---------|---------------|----------|------------|---------------------|
| S-DPS-40260 | IR1 | 4556 | ~~The AITTL CI shall have the capability to verify that Science Software source code is POSIX-compliant.~~ | | ~~functional~~ | agreed | ~~test/demo~~ |
| S-DPS-40280 | IR1 | 4557 | The AITTL CI shall have the capability to verify that Science Software source code and Science Software scripts follow the following SDP Toolkit usage requirements ~~(from 194-809-SD4-001, PGS Toolkit Users Guide for the ECS Project):~~ a.      Source code does not make any prohibited POSIX function calls b.      The ~~Status Message Text~~ Process Control Files have the correct format | | functional | agreed | test/demo |
| S-DPS-40295 | IR1 | 4893 | The AITTL CI shall provide standards checking capabilities, including, but not limited to: a. ~~Flagging whenever a bit operation is used on signed numbers. (C only)~~ ~~b.~~ Flagging argument list mismatches (type and number of arguments). | | functional | agreed | test/demo |
| S-DPS-40405 | ~~IR1~~ | 4562 | ~~The AITTL CI shall have the capability to determine if the Science Software contains out of bounds indexing.~~ | | ~~functional~~ | agreed | ~~test/demo~~ |
| S-DPS-40900 | ~~IR1~~ | ~~4579~~ | ~~The AITTL CI shall have the capability to find all differences between two data files which are greater than some specified absolute threshold.~~ | | ~~functional~~ | agreed | ~~test/demo~~ |
| S-DPS-40910 | IR1 | 4580 | The AITTL CI shall have the capability to find all differences between two HDF data files which are greater than ~~some specified relative threshold~~ a tolerance specified within the metadata of standard files. | AITTL capabilities include file comparison functions for HDF files. These can be used only if the user embeds the tolerance factors into the files. | functional | agreed | test/demo |
| S-DPS-40930 | IR1 | 4582 | The file comparison capability of the AITTL CI shall include the capability to read ASCII, ~~binary,~~ or HDF files. | | functional | agreed | test/demo |

| S-DPS-40940 | IR1 | 4583 | The file comparison capability of the AITTL CI shall include the capability to allow the operations staff to specify a custom data format for binary files. | AITTL provides templates/tools to allow operations to generate generic file comparison utilities for binary format files. | functional | agreed | test/demo |
|---|---|---|---|---|---|---|---|
| S-DPS-41000 | IR1 | 4584 | The AITTL CI shall have the capability to measure the CPU time of a PGE ~~process~~. | | functional | agreed | test/demo |
| S-DPS-41005 | IR1 | 4585 | The AITTL CI shall have the capability to measure the wall clock time of a ~~process~~ PGE.. | | functional | agreed | test/demo |
| S-DPS-41020 | IR1 | 4588 | The AITTL CI shall have the capability to measure the memory usage of a ~~process~~ PGE. | | functional | agreed | test/demo |
| S-DPS-41030 | IR1 | 4589 | The AITTL CI shall have the capability to measure the disk space usage of a ~~process~~ PGE. | | functional | agreed | test/demo |
| S-DPS-41035 | IR1 | 4590 | The AITTL CI shall have the capability to count the number of page faults for a ~~process~~ PGE. | | functional | agreed | test/demo |
| S-DPS-41040 | IR1 | 4591 | The AITTL CI shall have the capability to count the number of I/O accesses made by a ~~process~~ PGE to each of its input and output data files. | | functional | agreed | test/demo |
| S-DPS-41410 | ~~IR1~~ A | 9140 | The AITTL CI shall include access to a problem tracking tool supplied by MSS. | | interface | agreed | test/demo |
| S-DPS-41900 | A | 4619 | The AITTL CI shall provide ~~to the operations staff, via a GUI,~~ an HTML page describing the ECS instruments and providing hyperlinks to the PGE Listing Page for each team. ~~the capability to retrieve a specified data file from a specified Data Server~~. | | functional | approved | demo |
| S-DPS-41901 | A | NEW | The AITTL CI shall provide an HTML PGE Listing Page for each instrument team, identifying each PGE for which a software package is available, with references to its Software Version Page (if it exists) or else to its Software Listing Page. | | functional | approved | demo |

| S-DPS-41902 | A | NEW | The AITTL CI shall provide an HTML Software Version Page for each PGE, if multiple baseline software versions for that PGE are available, identifying the instrument and PGE, the version number and date, and provide a reference to the Software Listing Page. | | functio nal | approved | demo |
|---|---|---|---|---|---|---|---|
| S-DPS-41903 | A | NEW | The AITTL CI shall provide an HTML Software Listing Page for each baselined PGE version, identifying each existing component of the PGE software package (as defined in the ECS Core Metadata Model) and provide a hyperlink that can be used to retrieve that component. | | functio nal | approved | demo |
| S-DSS-10370 | A | NEW | The DDSRV shall support the display and access to (with links to the software package components they reference), the AITTL CI developed HTML pages, as follows:<br>a)   ECS Instruments Page<br>b)   PGE Listing Page<br>c)   Software Version Page<br>d)   Software Listing Page | | functio nal | approved | demo |
| S-DSS-05000 | A | NEW | The SDSRV CI shall manage algorithm packages as defined in the the ECS Core Metadata Model, and provide interfaces for storing and accessing them. | | functio nal | approved | demo |
| ~~S-DPS-42005~~ | ~~IR1~~ | ~~4621~~ | ~~The AITTL CI shall provide the operations staff with the capability to edit the metadata associated with a data file.~~ | | ~~functio nal~~ | agreed | ~~test~~ |
| S-DPS-42340 | A | 4642 | The operations staff shall have the capability to perform dynamic analyses of source code for (at a minimum) memory leaks, ~~out of bounds indexing,~~ and distribution of resource demands. | | functio nal | approved | demo |
| S-DPS-42360 | IR1 | 4644 | The operations staff shall have the capability of determining the computing resources utilized by an execution of a PGE; viz., PGE CPU time, system CPU time, elapsed time, percent elapsed time, ~~shared memory use,~~ maximum memory used, number of page faults, number of swaps, number of block input operations, and number of block output operations. | | functio nal | agreed | test/demo |

| S-DPS-42610 | IR1 A | 4658 | The operations staff shall enter new PGEs into the PGE Database, along with their performance and resource utilization information. | | procedural | agreed | test/demo |
|---|---|---|---|---|---|---|---|
| S-DPS-42620 | IR1 A | 4659 | The operations staff shall update information the PGE Database as necessary to reflect changes in performance and resource utilization resulting from a modification to a PGE. | | procedural | agreed | test/demo |

## Table 3: RBR changes

| RBR_id | req_key | req_category | segment | req_type | s_verif_method | s_verif_stat | a_verif_method | a_verif_stat | text | interpretation text | clar._text |
|---|---|---|---|---|---|---|---|---|---|---|---|
| PGS-0920#B | 4898 | mission essential | SDPS | functional | test | un-verified | test | | The PGS shall have the capability to validate, through testing, that SCF processing algorithms will execute properly in the operational environment. Validation shall include final compilation and linkage of the source code and testing to verify proper software execution in the operational environment based on indicated data and test results provided by the SCF and the investigator, but shall not include scientific validation of products. | B: AM-1, COLOR Transfer of algorithm implies verifying proper resource utilization resources.<br><br>~~Transfer of algorithm implies verifying proper resource utilization resources.~~ | |
| DADS2330#A | 4479 | mission essential | SDPS | functional | demo | un-verified | demo | | Each DADS shall send to the PGS, at a minimum, the following:<br>b. L0-L4<br>d. Metadata<br>e. Ancillary data<br>f. Calibration data<br>g. Algorithms<br>h. Schedules<br>i. Status<br>k. Special data sets<br>l. Non-EOS science data from ADCs/ODCs | A: sub-item A: ONLY THE GSFC AND LARC DAACS WILL INTERFACE WITH EDOS 1: 'algorithms' implies science software components. Algorithm and calibration data are accessed by HTML services provided through Data Server | |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| DADS2 370#A | 4485 | mission essential | S D P S | functional | demo | un-verified | demo | | Each DADS shall send to the user, at a minimum, the following:<br>a. L0-L4<br>b. Special products (L1-L4)<br>c. Metadata<br>d. Ancillary data<br>e. Calibration data<br>f. Correlative data<br>g. Documents<br>h. Algorithms<br>i. Planning and scheduling information | 1: 'algorithms' implies science software components. Algorithm and calibration data are accessed by HTML services provided through Data Server | |
| DADS2 380#A | 6133 | mission essential | S D P S | functional | demo | un-verified | demo | | Each DADS shall send to the SCF, at a minimum, the following:<br>a. L0-L4<br>b. Expedited data<br>d. Metadata<br>e. Ancillary data<br>f. Calibration data<br>g. Correlative data<br>h. Documents<br>i. Algorithms | 1: 'algorithms' implies science software components. Algorithm and calibration data are accessed by HTML services provided through Data Server | |
| DADS2 330#B | 3612 | mission essential | S D P S | functional | demo | un-verified | demo | | Each DADS shall send to the PGS, at a minimum, the following:<br>a. Production data (L0) received from EDOS<br>b. L0-L4<br>d. Metadata<br>e. Ancillary data<br>f. Calibration data<br>g. Algorithms<br>h. Schedules<br>i. Status<br>j. Spacecraft and instrument logs<br>k. Special data sets<br>l. Non-EOS science data from ADCs/ODCs | A & B: ONLY THE GSFC AND LARC DAACS WILL INTERFACE WITH EDOS<br>1: 'algorithms' implies science software components. Algorithm and calibration data are accessed by HTML services provided through Data Server | |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| DADS2 370#B | 3616 | mis sion ess enti al | S D P S | fun ctio nal | de mo | un- veri fied | de mo | | Each DADS shall send to the user, at a minimum, the following:<br>a. L0-L4<br>b. Special products (L1-L4)<br>c. Metadata<br>d. Ancillary data<br>e. Calibration data<br>f. Correlative data<br>g. Documents<br>h. Algorithms<br>i. Planning and scheduling information | 1: 'algorithms' implies science software components. Algorithm and calibration data are accessed by HTML services provided through Data Server | |
| DADS2 380#B | 6132 | mis sion ess enti al | S D P S | fun ctio nal | de mo | un- veri fied | de mo | | Each DADS shall send to the SCF, at a minimum, the following:<br>a. L0-L4<br>b. Expedited data<br>c. Special products (L1-L4)<br>d. Metadata<br>e. Ancillary data<br>f. Calibration data<br>g. Correlative data<br>h. Documents<br>i. Algorithms | 1: 'algorithms' implies science software components. Algorithm and calibration data are accessed by HTML services provided through Data Server | |
| SCF-0310#A | 2458 | TB D | S D P S | inte rfac e | TB D | un- verifi ed | | | The ECS shall have the capability to receive Calibration Coefficient<br>Requests from the SCF. The current or past calibration coefficients used in<br>processing of instrument data may be requested by the scientist from the<br>ECS. | 1: Calibration data are accessed by HTML services provided through Data Server | |
| SCF-0320#B | 2461 | TB D | S D P S | inte rfac e | TB D | un- verifi ed | | | The ECS shall be capable of sending to the SCF Calibration Coefficients.<br>These shall include the calibration coefficients requested by the scientist at<br>the SCF in the Calibration Coefficient Request. | 1: Calibration data are accessed by HTML services provided through Data Server | |

## Table 4:  Level 4 to RBR Link Additions

| RbR ID | L4 ID |
|---|---|
| DADS2330#A | S-DPS-41900 |
| DADS2330#A | S-DPS-41901 |
| DADS2330#A | S-DPS-41902 |
| DADS2330#A | S-DPS-41903 |
| DADS2330#A | S-DSS-10370 |
| DADS2330#A | S-DSS-05000 |
| DADS2330#B | S-DPS-41900 |
| DADS2330#B | S-DPS-41901 |
| DADS2330#B | S-DPS-41902 |
| DADS2330#B | S-DPS-41903 |
| DADS2330#B | S-DSS-10370 |
| DADS2330#B | S-DSS-05000 |
| DADS2370#A | S-DPS-41900 |
| DADS2370#A | S-DPS-41901 |
| DADS2370#A | S-DPS-41902 |
| DADS2370#A | S-DPS-41903 |
| DADS2370#A | S-DSS-10370 |
| DADS2370#A | S-DSS-05000 |
| DADS2370#B | S-DPS-41900 |
| DADS2370#B | S-DPS-41901 |
| DADS2370#B | S-DPS-41902 |
| DADS2370#B | S-DPS-41903 |
| DADS2370#B | S-DSS-10370 |
| DADS2370#B | S-DSS-05000 |
| DADS2380#A | S-DPS-41900 |
| DADS2380#A | S-DPS-41901 |
| DADS2380#A | S-DPS-41902 |
| DADS2380#A | S-DPS-41903 |
| DADS2380#A | S-DSS-10370 |
| DADS2380#A | S-DSS-05000 |
| DADS2380#B | S-DPS-41900 |
| DADS2380#B | S-DPS-41901 |
| DADS2380#B | S-DPS-41902 |
| DADS2380#B | S-DPS-41903 |
| DADS2380#B | S-DSS-10370 |
| DADS2380#B | S-DSS-05000 |
| PGS-0930#A | S-DPS-42610 |
| PGS-0930#A | S-DPS-42620 |
| PGS-0950#A | S-DPS-41410 |

| | |
|---|---|
| PGS-0960#A | S-DPS-42610 |
| PGS-0960#A | S-DPS-42620 |
| SCF-0320#A | S-DPS-41900 |
| SCF-0320#A | S-DPS-41901 |
| SCF-0320#A | S-DPS-41902 |
| SCF-0320#A | S-DPS-41903 |
| SCF-0320#A | S-DSS-10370 |
| SCF-0320#A | S-DSS-05000 |
| SCF-0320#B | S-DPS-41900 |
| SCF-0320#B | S-DPS-41901 |
| SCF-0320#B | S-DPS-41902 |
| SCF-0320#B | S-DPS-41903 |
| SCF-0320#B | S-DSS-10370 |
| SCF-0320#B | S-DSS-05000 |

**Table 5:  Level 4 to RBR Link Deletions**

| PGS-0920#A | S-DPS-41900 |
|------------|-------------|
| PGS-0920#B | S-DPS-41900 |